

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: io LED

Report Number: P273395

Luminaire Tested: **0.05-03W-827-90SYM-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273395
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-246-4)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 0.05-03W-827-90SYM-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES 2.0 LINEAR LED LUMINAIRE. 90 DEGREE SYMMETRIC OPTIC.
STANDARD OUTPUT
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 775.5 lumens
Efficiency: N/A
Efficacy: 48.5 lumens/watt
Spacing Criteria (0/90/45): 1.34 / 1.29 / 1.43
Luminous Opening: Rectangular (W 2.92' x L: 0.17' x H: 0')
CIE Type: Direct

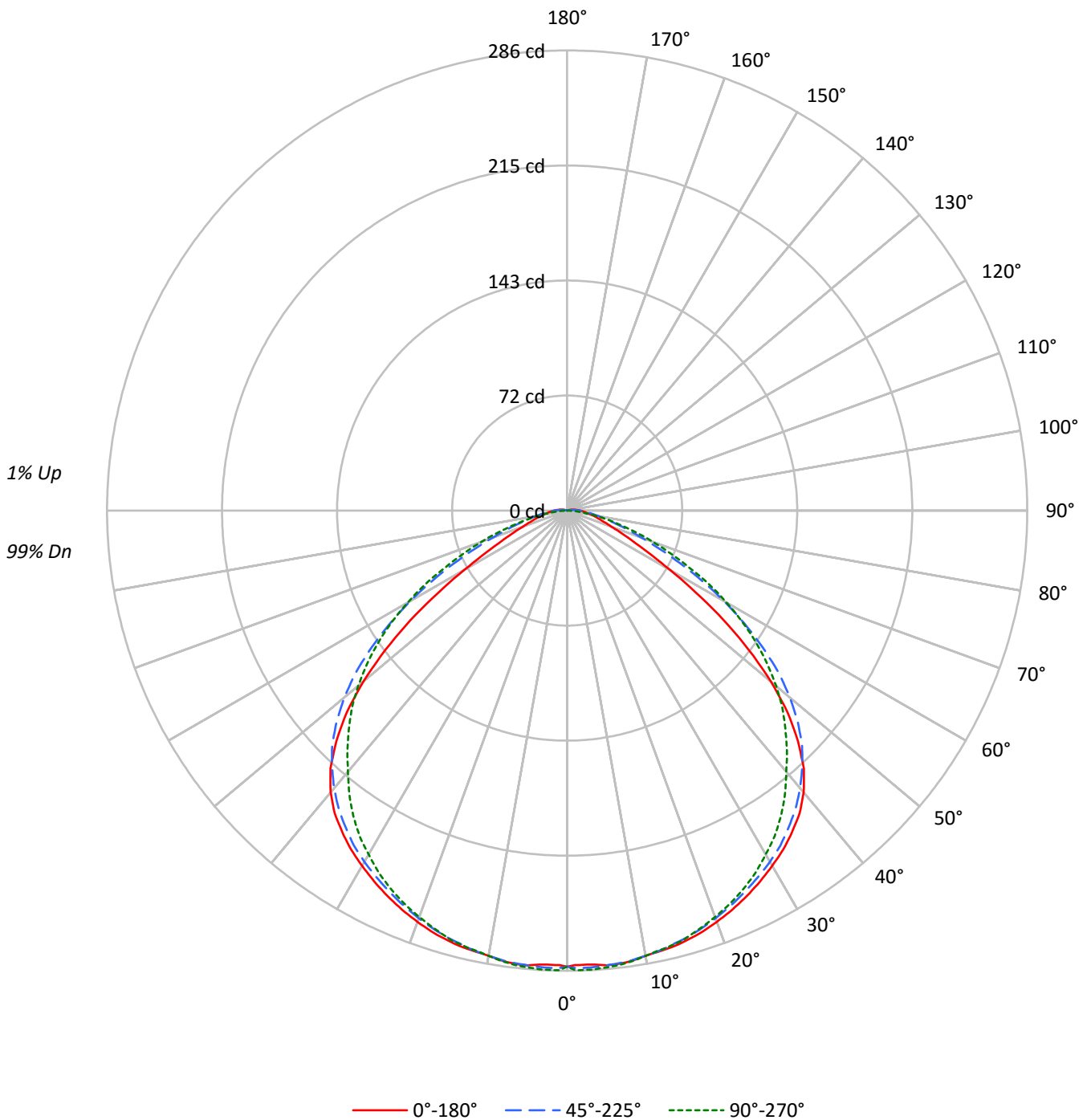
Input Watts (W): 16
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99
1	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	81	98	90	85	80	87	82	78	84	79	76	80	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	63	61
4	84	73	64	58	82	71	63	57	69	62	57	66	61	56	64	59	55	53
5	78	65	56	50	75	64	56	50	62	55	49	60	53	49	58	52	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6278	6278	6278
5°	6306	6306	6335
10°	6318	6318	6318
15°	6368	6334	6343
20°	6409	6355	6334
25°	6457	6387	6338
30°	6517	6446	6310
35°	6590	6493	6263
40°	6611	6512	6125
45°	6354	6466	6006
50°	5701	6221	5839
55°	4598	5729	5544
60°	3259	4995	5066
65°	2358	4045	4375
70°	1897	3192	3658
75°	1788	2635	2892
80°	1976	2499	2206
85°	2871	3150	1474



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.0	3.5
10°-20°	78.0	10.1
20°-30°	120.6	15.5
30°-40°	149.1	19.2
40°-50°	154.7	19.9
50°-60°	124.3	16.0
60°-70°	71.6	9.2
70°-80°	32.8	4.2
80°-90°	12.6	1.6
90°-100°	4.0	0.5
100°-110°	0.9	0.1
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	225.6	29.1
0°-40°	374.7	48.3
0°-60°	653.7	84.3
0°-90°	770.6	99.4
90°-120°	4.9	0.6
90°-150°	4.9	0.6
90°-180°	5.0	0.6
0°-180°	775.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	284	284	284	284	284	
5°	284	284	284	282	285	27
15°	278	277	276	275	277	78
25°	264	264	261	258	259	122
35°	244	242	240	233	232	152
45°	203	205	206	197	192	155
55°	119	130	148	149	144	106
65°	45	53	77	90	84	47
75°	21	23	31	39	34	23
85°	11	12	12	12	6	10
90°	8	8	8	5	0	4
95°	6	5	4	2	0	4
105°	2	2	0	0	0	2
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	283.5	283.5	283.5	283.5	283.5	283.5	283.5	283.5	283.5	283.5	283.5
1°	282.6	282.5	281.9	282.1	283.4	284.4	284.8	284.6	284.8	284.3	284.1
2°	282.5	282.3	281.7	282.3	283.4	284.3	284.8	284.6	284.6	284.4	284.3
3°	282.5	282.5	281.7	282.5	283.4	284.1	284.4	284.4	284.4	284.3	284.1
4°	283.0	283.0	282.1	282.6	283.2	283.9	284.3	284.1	284.3	284.1	283.9
5°	283.7	283.2	282.3	282.6	283.4	283.7	284.1	283.7	283.9	283.7	283.7
6°	283.7	283.4	282.5	282.5	283.2	283.2	283.5	283.4	283.7	283.4	283.4
7°	283.4	283.0	282.1	282.3	282.6	283.0	283.4	283.2	283.2	283.0	282.8
8°	282.8	282.3	281.4	281.4	282.3	282.6	283.0	282.8	282.8	282.5	282.5
9°	281.9	281.4	280.3	280.5	281.4	281.9	282.3	282.3	282.1	281.7	281.7
10°	281.0	280.5	279.8	279.9	280.7	281.2	281.6	281.7	281.6	281.0	280.8
11°	280.3	279.9	279.0	279.2	280.3	280.7	280.8	281.0	280.8	280.3	280.3
12°	279.8	279.4	278.3	278.5	279.4	279.9	279.9	280.1	280.1	279.4	279.4
13°	279.2	278.7	277.8	278.0	278.5	279.4	279.4	279.4	279.4	278.5	278.7
14°	278.7	278.0	277.2	277.1	277.6	278.5	278.5	278.3	278.3	277.2	277.8
15°	277.8	277.4	276.7	276.7	277.2	277.6	277.6	277.6	277.2	276.3	277.1
17.5°	275.3	274.7	274.2	273.8	274.6	274.9	274.7	274.7	274.2	273.3	274.0
20°	272.0	271.5	271.0	270.6	271.0	271.1	271.1	271.0	270.4	269.7	270.1
22.5°	268.4	267.9	267.4	266.8	267.2	267.7	267.2	267.2	266.6	265.7	265.9
25°	264.3	263.9	263.4	262.9	263.4	263.6	263.0	263.0	262.5	261.4	261.4
27.5°	259.8	259.8	259.1	258.5	259.3	259.3	258.5	258.9	257.8	256.9	257.1
30°	254.9	254.9	254.2	253.7	254.0	254.2	253.5	253.5	252.8	252.1	251.7
32.5°	249.9	249.9	249.2	248.3	248.5	248.8	247.9	247.6	246.8	246.7	246.5
35°	243.8	243.8	243.1	242.2	242.3	242.3	241.6	241.1	240.5	240.2	239.6
37.5°	237.3	237.1	236.4	235.5	235.5	235.9	235.0	234.2	233.5	233.3	233.0
40°	228.7	228.7	228.0	227.4	227.4	227.6	227.1	226.5	225.8	225.3	224.7
42.5°	217.7	217.9	217.0	216.8	217.5	218.1	218.2	217.9	217.2	216.3	216.3
45°	202.9	203.7	203.1	203.3	204.6	205.8	206.4	206.9	206.9	206.5	205.8
47.5°	186.0	185.7	185.9	186.9	188.4	190.9	192.5	193.9	194.8	194.3	194.3
50°	165.5	165.7	165.9	167.9	169.7	173.3	176.1	178.1	179.7	180.6	180.5
52.5°	142.3	143.6	144.1	146.6	149.0	153.1	157.2	160.5	163.5	165.7	166.1
55°	119.1	118.9	120.9	123.8	127.4	132.1	137.1	141.1	145.4	148.4	150.6
57.5°	94.6	95.7	97.3	100.6	104.7	111.0	116.2	121.3	126.1	130.6	133.9
60°	73.6	74.1	75.9	78.6	82.6	88.3	95.5	101.5	106.7	112.8	116.6
62.5°	56.9	57.4	59.2	61.4	65.1	69.4	75.4	81.3	87.8	94.6	99.1
65°	45.0	45.0	46.1	47.9	50.6	54.5	59.2	64.6	70.7	77.2	82.2
67.5°	36.0	36.2	37.1	38.0	39.9	43.0	46.6	50.7	56.1	62.1	67.1
70°	29.3	29.7	30.2	30.8	32.0	34.2	36.7	39.9	44.1	49.3	54.2
72.5°	24.6	24.6	25.0	25.4	26.3	27.7	29.7	31.8	35.3	39.0	43.0
75°	20.9	21.1	21.1	21.4	22.1	23.0	24.3	25.7	27.9	30.8	34.0
77.5°	18.0	17.8	18.2	18.2	18.7	19.3	20.2	21.1	22.8	24.5	26.6
80°	15.5	15.3	15.5	15.5	15.8	16.2	16.6	17.3	18.5	19.6	20.9
82.5°	13.1	13.1	13.1	13.3	13.3	13.5	14.0	14.4	14.9	15.7	16.4
85°	11.3	11.3	11.3	11.3	11.5	11.5	11.5	11.9	12.1	12.4	12.8
87.5°	9.7	9.7	9.7	9.5	9.4	9.7	9.7	9.7	9.9	9.9	9.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
90°	8.1	8.3	7.9	7.9	7.9	7.9	7.9	7.7	7.7	7.7	7.4
92.5°	6.8	6.8	6.7	6.7	6.7	6.5	6.3	6.3	5.9	5.9	5.6
95°	5.6	5.6	5.6	5.4	5.2	5.2	5.0	4.9	4.5	4.1	3.8
97.5°	4.5	4.5	4.3	4.1	4.1	4.1	3.8	3.6	3.4	3.1	2.5
100°	3.4	3.4	3.4	3.4	3.2	3.1	2.9	2.7	2.3	2.0	1.6
102.5°	2.7	2.7	2.7	2.5	2.3	2.2	2.0	1.8	1.4	1.1	0.7
105°	2.0	2.0	2.0	1.8	1.6	1.4	1.3	1.1	0.9	0.5	0.2
107.5°	1.3	1.3	1.3	1.1	1.1	0.9	0.7	0.5	0.2	0.2	0.0
110°	0.7	0.7	0.7	0.5	0.5	0.5	0.2	0.2	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	283.5	283.5	283.5	283.5	283.5	283.5	283.5	283.5
1°	282.8	282.3	282.6	282.5	283.4	285.2	285.5	285.7
2°	282.8	282.3	282.8	282.6	283.4	285.0	285.5	285.7
3°	282.6	282.5	282.8	282.6	283.2	284.8	285.5	285.7
4°	282.6	282.3	282.6	282.5	282.8	284.4	285.2	285.3
5°	282.5	282.1	282.5	282.3	282.5	284.3	284.8	285.0
6°	282.1	281.6	282.3	281.9	282.1	283.7	284.4	284.6
7°	281.7	281.0	281.7	281.6	281.6	283.0	283.7	283.9
8°	281.4	280.5	281.2	281.0	281.0	282.3	282.8	283.2
9°	280.7	279.4	280.5	280.3	280.3	281.4	281.9	282.1
10°	279.9	278.7	279.6	279.8	279.4	280.5	281.0	281.0
11°	279.2	277.8	278.9	278.9	278.7	279.8	280.3	279.9
12°	278.3	276.9	278.0	278.0	278.0	278.7	279.2	279.2
13°	277.2	276.2	277.1	276.9	277.1	278.0	278.5	278.5
14°	276.3	275.1	276.0	276.0	276.0	277.1	277.4	277.4
15°	275.4	274.2	274.7	274.9	275.1	276.2	276.5	276.7
17.5°	272.0	271.3	271.1	271.7	271.9	272.4	272.6	272.8
20°	268.6	267.4	267.5	267.5	267.7	268.8	268.6	268.8
22.5°	264.8	263.0	263.0	263.6	263.4	264.7	264.1	264.5
25°	260.3	258.5	258.0	258.9	258.7	259.6	259.4	259.4
27.5°	255.5	254.0	252.8	253.9	253.3	253.9	253.5	253.7
30°	250.6	248.1	247.4	247.7	247.2	247.7	247.2	246.8
32.5°	245.0	242.2	240.7	241.4	240.5	241.1	240.2	240.0
35°	238.6	235.9	233.5	233.3	232.8	232.5	231.9	231.7
37.5°	231.7	228.9	226.3	225.1	223.8	223.5	222.6	222.4
40°	223.6	220.8	217.3	216.1	214.3	213.7	212.3	211.9
42.5°	214.3	211.8	208.3	206.4	204.9	203.7	202.2	202.2
45°	204.2	201.3	197.9	196.3	194.8	193.6	192.0	191.8
47.5°	192.9	190.2	187.3	185.1	184.1	182.8	181.5	181.4
50°	180.1	178.1	176.0	173.8	172.4	170.7	169.3	169.5
52.5°	166.6	165.2	163.5	161.6	159.9	158.1	156.9	156.9
55°	151.8	151.5	150.2	148.4	146.6	144.8	143.6	143.6
57.5°	136.2	136.7	136.4	134.4	133.0	130.6	129.7	129.5
60°	120.0	121.6	121.6	120.0	118.6	116.2	115.0	114.4
62.5°	103.1	105.3	106.0	104.9	103.6	101.5	99.9	99.7
65°	86.4	89.1	90.5	89.6	88.2	85.6	84.2	83.5
67.5°	71.6	74.3	74.7	75.0	73.6	71.8	70.2	69.4
70°	58.3	60.6	61.7	61.5	60.5	58.7	57.0	56.5
72.5°	46.6	48.9	50.0	49.3	48.4	47.0	45.5	44.6
75°	36.9	38.5	39.4	38.7	37.6	36.0	35.3	33.8
77.5°	28.6	29.9	30.4	29.7	28.4	27.2	25.9	24.8
80°	22.3	23.0	23.2	21.9	20.7	19.4	18.0	17.3
82.5°	17.1	17.5	17.1	15.7	14.2	12.8	11.5	10.8
85°	13.1	13.0	12.2	10.8	9.2	7.7	6.3	5.8
87.5°	9.7	9.4	8.5	7.0	5.4	4.0	2.7	2.2



TEST NUMBER: P273395

CATALOG NUMBER: 0.05-03W-827-90SYM-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
90°	7.0	6.7	5.6	4.3	2.9	1.6	0.7	0.0
92.5°	5.0	4.3	3.4	2.3	1.3	0.4	0.0	0.0
95°	3.4	2.7	2.0	1.1	0.4	0.0	0.0	0.0
97.5°	2.0	1.4	0.9	0.2	0.0	0.0	0.0	0.0
100°	1.1	0.5	0.2	0.0	0.0	0.0	0.0	0.0
102.5°	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)